



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,223	09/30/2003	Michael P. Boutillette	BSME120587	9880
26389	7590	06/05/2009		
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC			EXAMINER	
1420 FIFTH AVENUE			NGUYEN, HUONG Q	
SUITE 2800			ART UNIT	PAPER NUMBER
SEATTLE, WA 98101-2347			3736	
		MAIL DATE	DELIVERY MODE	
		06/05/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/675,223	Applicant(s) BOUTILLETTE ET AL.
	Examiner HELEN NGUYEN	Art Unit 3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 13 May 2009.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-6,10 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-6,10 and 20-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/1449)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/13/2009 has been entered.
2. Claims 1 and 10 are amended, overcoming the previous claim objection. **Claims 1, 4-6, 10, and 20-26** remain pending and under prosecution.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. **Claims 1, 5-6, 21-23, and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al (US Pat No. 6030349) in view of Sherts et al (US Pat No. 6533772) and Hedger (US Pat No. 4057186).
5. In regards to **Claim 1**, Wilson et al disclose a device for applying torque to a wire, comprising:

a body portion 16 having an open ended channel 34 with opposed side surfaces including space of internal cavity 36 with a bottom surface that extends along an entire length of the body portion for allowing the wire to be side-loaded into the channel, best seen in Figure, best seen in Figure 1 and 3;

a tongue 38 supported in the channel, the tongue including a first engagement surface 44, 48 positioned above the bottom surface of the channel, best seen in Figure 3-4;

a slider button 60 that is slideable within at least the internal cavity 36 portion of the open ended channel of the body portion, the slider having a second engagement surface 70, 74 disposed adjacent the wire when the wire is side loaded in the channel, best seen in Figure 3-4;

wherein movement of the slider within at least the internal cavity 36 portion of the open ended channel of the body portion compresses the wire between the first engagement surface and the second engagement surface of the slider so that rotation of the body portion applies torque to the wire (Col.6: 31-59).

6. However, Wilson et al do not teach that the tongue is suspended between the opposing side surfaces and the slider operates with longitudinal movement. Sherts et al teach an analogous device with tongue 104 suspended at least at some time between opposing side surfaces of body 100a with a channel, best seen in Figure 12C. Sherts et al also teach the body portion with a channel and a slider button 106 that is longitudinally slid able within the channel to variably compress a wire between a vertically moving clamp pad 104 and the bottom of the channel, best seen in Figure 12. Hedger teaches another analogous device wherein wire is compressed between the under surface of tongue-like suspended slider 16 and the upper surface of element

19. Hedger also teaches the slider longitudinally slidable within the channel, best seen in Figure 4 and 7.

7. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilson et al such that the tongue is suspended between the opposing side surfaces as taught by the combination of Sherts et al and Hedger, such that in combination the wire is compressed between a first engagement surface positioned above the bottom surface of the channel and a second engagement surface on the slider disposed adjacent the wire, because the substitution of one known element for another would have yielded predictable results to effectively provide wire torquing. Also, since Wilson et al already teach the vertical movement of slider button 60, it would have been obvious to one of ordinary skill in the art to modify the slider of Wilson et al to be longitudinally slideable within the open ended channel of the body portion as taught by Sherts et al to more effectively compress the wire such as by allowing more degree or variation of the amount of compression of the wire depending on the slider's longitudinal position.

8. In regards to **Claim 5-6**, Wilson et al disclose the body portion 16 has a grip enhancing mechanism comprising one or more ridges on the exterior of the body portion (Col.4: 51-55).

9. In regards to **Claim 21**, Wilson et al disclose the tongue 38 is defined by the body portion 16, best seen in Figure 3-4.

10. In regards to **Claim 22**, Wilson et al disclose the slider 60 is U-shaped and includes an open ended channel 68, best seen in Figure 3, and wherein the engagement surface 70, 74 of the U-shaped slider forms a portion of the open ended channel of the slider, the open ended channel of the U-shaped slider receiving the wire when the wire is side loaded in the channel of the body portion 16, best seen in Figure 2-4.

11. In regards to **Claim 23**, Wilson et al disclose the open ended channel 34 of the body is U-shaped, best seen in Figure 2-3.

12. In regards to **Claim 26**, Wilson et al disclose the first engagement surface 44, 48 of the tongue 38 faces the bottom of the channel 34, best seen in Figure 3.

13. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al in view of Sherts et al and Hedger, further in view of Intlekofer et al.

14. Wilson et al in combination with Sherts et al and Hedger disclose the invention above but do not disclose the first engagement surface of the tongue and the second engagement surface of the slider are angled in a similar manner with respect to the bottom surface of the open ended channel so that the wire is compressed therebetween. Intlekofer et al teach an analogous device wherein a wedge 24 and the bottom 34 of the body portion 12 are angled in a similar manner to allow effective pinching of the wire, best seen in Figure 2-3. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first and second engagement surface of the tongue and the slider respectively of Wilson et al as

modified by Sherts et al and Hedger to be angled in a similar manner as taught by Intlekofer et al with respect to the bottom surface of the open ended channel to effectively compress the wire therebetween.

15. **Claims 10 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al in view of Sherts et al

16. In regards to **Claim 10**, Wilson et al disclose a wire torquing device, comprising:
a body 16 having a length;
an open ended channel 34 including internal cavity 36 and having a bottom surface, the open ended channel extending along the entire length of the body into which a wire can be laterally fitted, best seen in Figures 2-4;
a projection 38 that projects into the open-ended and is suspended above the bottom surface, best seen in Figure 3-4;
a slider button 60 that remains in the internal cavity portion of the open ended channel as the wire is laterally filled along the length of the open ended channel and is movable therein, the slider including an open ended channel 68 configured for laterally receiving the wire and being substantially aligned with the open ended channel of the body, best seen in Figure 3-4, the open ended channel of the slider defining an engagement surface 70, 74, best seen in Figure 3;
wherein the open ended channel of the slider laterally receives a portion of the wire when laterally fitted in the open ended channel of the body, and wherein the engagement surface

of the slider secures the wire against surface 44, 48 of the projection as the slider is moved in the internal cavity 36 portion of the open ended channel of the body (Col.6: 31-59).

17. However, Wilson et al do not teach that the slider operates with longitudinal movement. Sherts et al teach an analogous device comprising a body portion with a channel and a slider button 106 that is longitudinally slidable within the channel to variably compress a wire between a vertically moving clamp pad 104 and the bottom of the channel, best seen in Figure 12. Since Wilson et al already teach the vertical movement of slider button 60, it would have been obvious to one of ordinary skill in the art to modify the slider of Wilson et al to be longitudinally slideable within the open ended channel of the body portion as taught by Sherts et al to more effectively compress the wire such as by allowing more degree or variation of the amount of compression of the wire depending on the slider's longitudinal position.

18. In regards to **Claim 24**, Wilson et al disclose a tongue 38 disposed in the open ended channel 34, wherein the tongue cooperates with the engagement surface 70, 74 on the slider 60 to secure the wire in a fixed position, best seen in Figure 3-4 (Col.6: 31-59).

19. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Loney et al (US Pat No. 5137517) in view of Sherts et al, further in view of Intlekofer et al (US Pat No. 4858810).

20. Loney et al disclose a wire torquing device comprising:
a body (10) having an open U-shaped channel (12) extending along an entire length thereof in which a wire (14) can be fitted, best seen in Figures 1-2;

a slider (16) that is movable longitudinally within the channel; wherein the open U-shaped channel (12) includes a pair of sidewalls and a bottom surface. However, Loney et al do not disclose said channel including a fixed wedge positioned on one of the side walls of the channel and the slider includes an engagement surface facing the wedge, the slider longitudinally movable towards the wedge to pinch the wire against the wedge.

21. Sherts et al disclose an analogous device comprising a channel (100b) including a clamp pad (104) fixed in the horizontal direction and positioned on a side wall of the channel as well as a slider (106) with an engagement surface (106a) facing the clamp pad, the slider longitudinally movable towards the clamp pad to pinch a wire against the wedge, best seen in Figures 12b-c (Col.10: 4-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the clamping mechanism of Loney et al such that the U-shaped channel includes a fixed clamp pad positioned on one of the side walls and the slider includes an engagement surface facing the clamp pad that is longitudinally movable towards the wedge as taught by Sherts et al to effectively pinch a wire against the clamp pad, wherein the substitution of one known mechanism for another would have yielded predictable results to provide effective wire torquing.

22. However, Loney et al and Sherts et al do not disclose the clamp pad is in the shape of a wedge. Intlekofer et al teach that an analogous device comprises a wedge 24 used to effectively pinch a wire against the bottom of an inclined bottom surface 34 of the body 12 of the device, best seen in Figure 2-3. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the clamp pad of Loney et al as modified by Sherts et al to be in the shape of a wedge as taught by Intlekofer et al to more effectively pinch the wire

against the bottom of the channel. It would have also been obvious to one of ordinary skill in the art to modify the wedge to have an angled engagement surface to face the engagement surface 106a of the slider of Sherts et al to more effectively allow the two pieces to move together by providing complimentary angled surfaces.

23. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Loney et al in view of Sherts et al and Intlekofer et al, further in view of Wilson et al.

24. Loney et al in combination with Sherts et al and Intlekofer et al disclose the invention above but do not teach that movement of the slider pinches the wire between the engagement surface of the slider and the angled engagement surface of the wedge. Wilson et al teach an analogous device comprising a slider button 60 with engagement surface 70, 74 which pinches a wire between the fixed engagement surface 44, 48 as an effective means to hold the wire for torquing purposes, best seen in Figure 3-4 (Col.6: 31-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Loney et al as modified by Sherts et al and Intlekofer et al such that movement of the slider pinches the wire between the engagement surface of the slider and the angled engagement surface of the wedge as taught by Wilson et al as an equally as effective means to pinch the wire wherein both perform the same function and the substitution of one mechanism for the other would provide predictable and desired results.

Response to Arguments

25. Applicant's arguments with respect to claims 1, 4-6, 21-23, and 26 have been considered but are moot in view of the new ground(s) of rejection.

26. Regarding Claim 10, it is maintained that Wilson et al still teach the projection 38 projects into the open ended channel 34 and is suspended above the bottom surface 46, 52, best seen in Figure 3-4.

27. Regarding Claim 20, it is maintained that the substitution of the clamping mechanism of Loney et al for that of Sherts et al would have been obvious to one of ordinary skill in the art at the time of the invention because the substitution would have yielded predictable results to provide effective wire torquing.

28. Applicant also contends that modifying the clamp pad to have a wedge shape would not be obvious due to the result of decreasing the clamping surface against the wire. However, it is not apparent how this would occur. It is believed that making the clamp pad to be wedge shaped would effectively pinch the wire against the bottom of the channel. It is also possible that providing the wedge shape would enable more efficient pinching of the wire as the slider will not have to travel as far in the channel to pinch the wire, thus providing a more responsive device. Furthermore, it is believed that one of ordinary skill in the art would know how to make the modification without decreasing the effectiveness of the device by for example, decreasing the clamping surface.

29. Applicant is also reminded that it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed

invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN NGUYEN whose telephone number is (571)272-8340. The examiner can normally be reached on Monday - Friday, 9 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. N./
Examiner, Art Unit 3736

Application/Control Number: 10/675,223

Page 12

Art Unit: 3736

/Max Hindenburg/

Supervisory Patent Examiner, Art Unit 3736